

The High Plains Drifter



**NATIONAL WEATHER SERVICE
NORTH PLATTE, NE**



<http://www.weather.gov/northplatte>

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National Weather Service

Winter 2021

February 2nd is Groundhog Day

By Jaclyn Gomez-Meteorologist

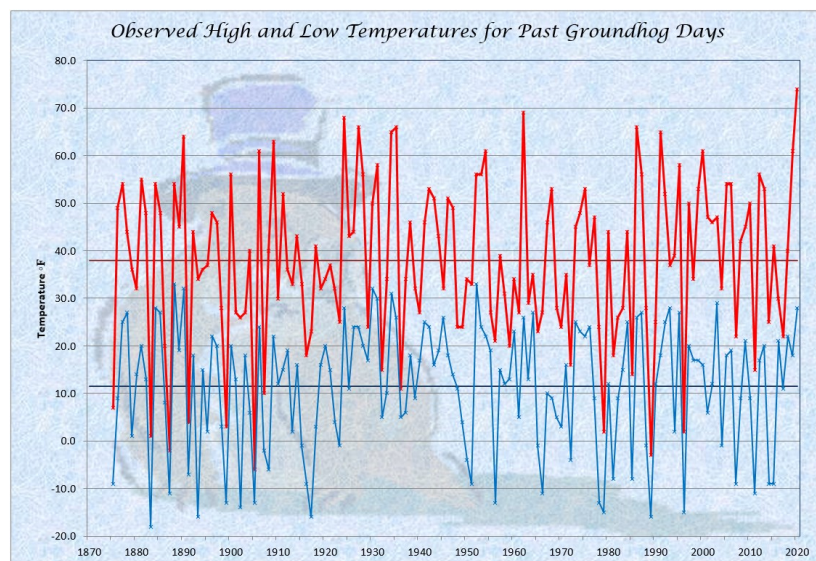
Groundhog Day has long been associated with weather. This day always falls on February 2 of every year. On Groundhog Day if the groundhog sees his shadow it means six more weeks of winter. If the groundhog doesn't see his shadow then we can expect an early Spring.

How did Groundhog Day come about? Groundhog Day is similar to Candlemas, which occurred between the winter solstice and the spring solstice, which happened to be February 2nd. For some European Christians it was believed that if the day of Candlemas was sunny, that would mean another 40 days of cold and snow.

Germans developed their own legend, but instead used badgers to determine if the day was considered sunny. Their legend stated that if a badger sees its shadow, then the day would be considered sunny. This legend then eventually progressed to the groundhog as German immigrants moved to Pennsylvania in the 18th and 19th centuries.

The first Groundhog Day took place on February 2, 1887 in Punxsutawney, Pennsylvania. Every year tens of thousands of people make the trip to Punxsutawney to see the Groundhog Day proceedings. Those who preside over the proceedings are known as the Inner Circle and will read the proceedings in Pennsylvania Dutch to the groundhog named, Punxsutawney Phil.

Below is a look at Groundhog Day climate for North Platte, Nebraska.

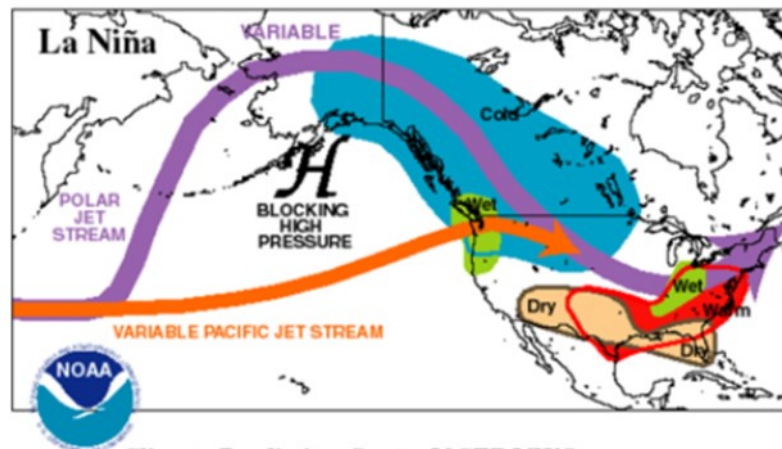


LA NIÑA AND ITS IMPACT ON WINTER TEMPERATURES AND PRECIPITATION FOR WESTERN AND NORTH CENTRAL NEBRASKA

BY CHRIS BUTTLER-SENIOR FORECASTER

Unlike its warm cousin El Niño, La Niña is indicative of cooler than normal sea surface temperatures in the equatorial Pacific. Abnormally warm sea surface temperatures (El Niño) and abnormally cool sea surface temperatures (La Niña) can play a significant role in precipitation and temperature patterns across the continental United States particularly in the winter months. Sea surface temperatures are labeled abnormal when they are 0.5°C above normal and warmer (El Niño) or 0.5°C below normal and cooler (La Niña). Current sea surface temperatures in the equatorial Pacific are running 1.3°C below normal-equating to a moderate strength La Niña.

What does a moderate La Niña bring for typical winter conditions to western and north central Nebraska? In a La Niña, the weather pattern favors northwesterly flow aloft across the northern portion of the United States.



In a northwesterly flow pattern, there is an increased occurrence of “clipper” systems which track from Alberta, Canada into the Dakotas and upper Midwest. If the track of these systems remain in the Dakotas and upper Midwest, we tend to see a warmer and drier than normal winter across western and north central Nebraska. If this track is further south, near normal temperatures and near normal precipitation is expected, particularly over northern Nebraska. So this winter, warmer and drier conditions have been dominant and the storm track has been predominately well north of the area.

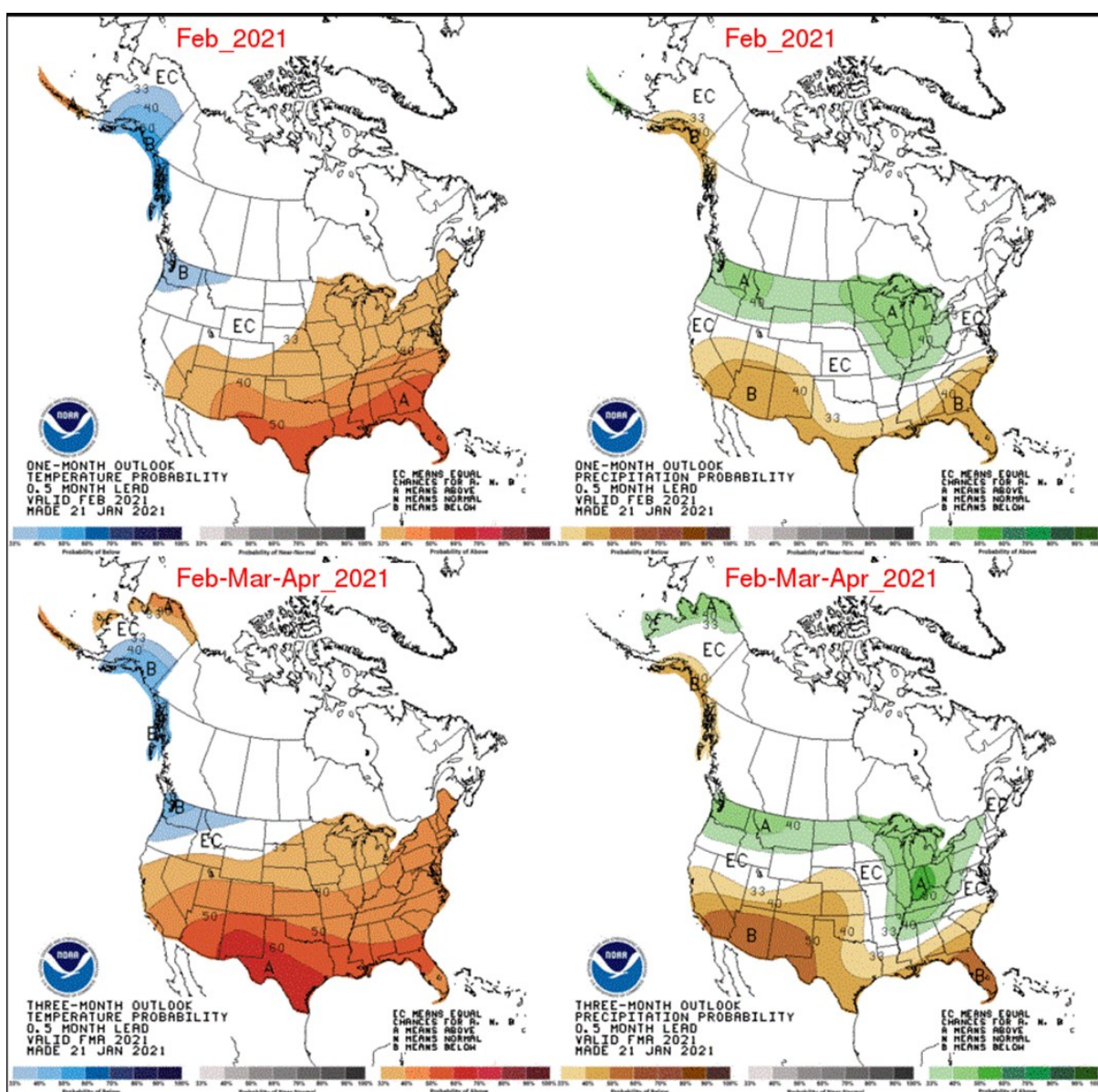
November through December average temperatures and precipitation for North Platte, Valentine, Imperial and Broken Bow are summarized below:

Location	November				December			
	Avg. Temp(F)	Departure	<u>Precip.</u>	Departure	Avg. Temp(F)	Departure	<u>Precip.</u>	Departure
N. Platte	42.2	+6.6	0.28	-0.36	31.2	+5.8	0.72	+0.31
Valentine	42.1	+7.7	0.82	+0.17	32.3	+8.5	0.43	+0.06
B. Bow	42.6	+6.8	0.80	-0.15	31.4	+5.9	0.84	+0.34
Imperial	44.0	+6.3	0.23	-0.40	32.5	+4.1	0.07	-0.33

LA NIÑA AND ITS IMPACT ON WINTER TEMPERATURES AND PRECIPITATION FOR WESTERN AND NORTH CENTRAL NEBRASKA CONTINUED

The latest outlook for February and the outlook for February, March and April is in the graphic below. For February, the temperature forecast is for above normal temperatures generally east of a line from Hayes Center to O'Neill. West of this line, there are equal chances for above, below or near normal temperatures. The precipitation outlook for February is for equal chances for above, below or near normal precipitation. A forecast of equal chances means there is not enough of a long range forecast signal to push the forecast to above or below normal.

As for the February, March, and April outlook, temperatures are forecast to be above normal and precipitation below normal, though the signal for above normal temperatures and below normal precipitation is weak with this forecast.



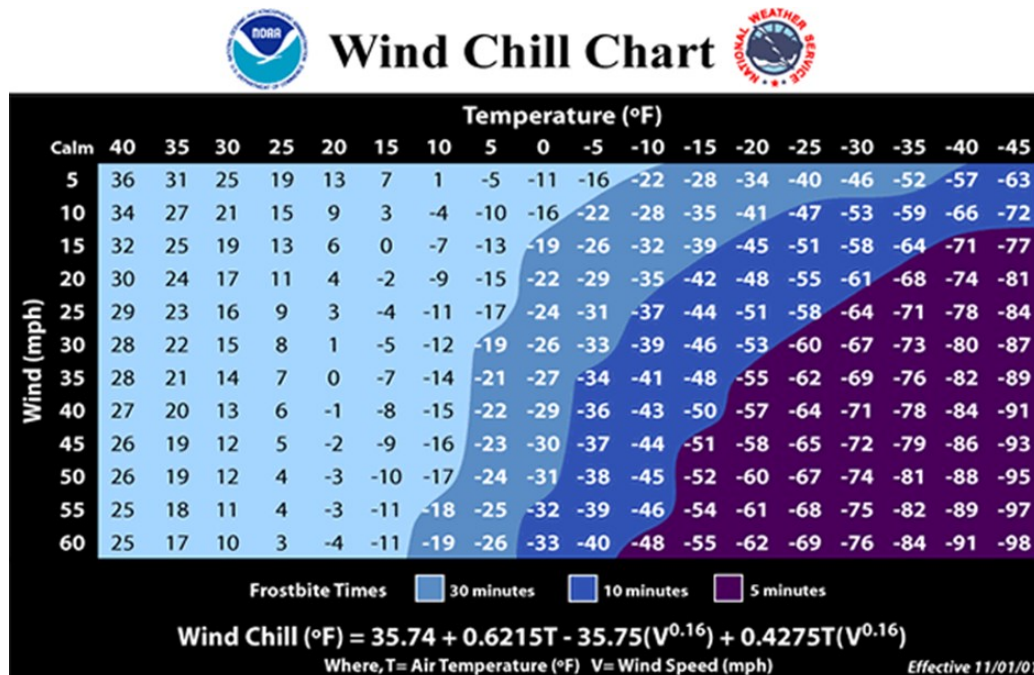
WIND CHILL

By Sam Meltzer—Meteorologist

What Is Wind Chill?

The combination of wind and low temperatures creates a dangerous phenomenon known as **wind chill**. Although the air is not actually colder, it feels colder because the layer of warm air immediately next to your skin is blown away and replaced with colder air. In turn, it becomes harder for your body to maintain a healthy temperature. When the body cools off faster than it can replace body heat, it can result in a dangerously low body temperature known as hypothermia. This can also lead to frostbite, which is the actual freezing of body tissue.

Wind chill is calculated based on the actual air temperature and wind speed. This chart provides an easy way to determine the wind chill temperature. For example, if the air temperature is 10° F and the wind speed is 30 miles per hour, the body will lose heat at the same rate as if it were -12°F. The colors on the chart indicate how long it would take to become frostbitten.



Wind Chill Safety

Frostbite and hypothermia are the two main health threats related to wind chill, both of which can lead to injury or death. These steps can help keep you safe from wind chill:

- Stay indoors in a heated building during cold and windy weather.
- If you need to go outside, wear warm, layered clothing and cover all exposed skin.
- Stay dry and avoid overexertion that causes you to sweat.
- Understand the symptoms of hypothermia (confusion, shivering, sleepiness, stiff muscles) and frostbite (loss of feeling, pale skin).

NWS North Platte Now on Instagram!

By DARREN SNIVELY—SENIOR METEOROLOGIST

We've expanded our social media presence this winter by joining Instagram! NWS North Platte is part of a regional initiative to expand the National Weather Service outreach program through its online profile. As always, you may find us on Facebook and Twitter. We showcase different information for each platform, so follow your favorite (or all!) with our handle 'NWSNorthPlatte'.

Twitter comprises frequent updates throughout the day, ranging from severe weather alert graphics to road and radar updates during winter weather, climate statistics and other interesting facts, daily weather story graphics, and fun weather photos.



Our Facebook profile revolves around the main weather story graphics (updated twice daily), intermittent "nowcast" updates during active weather, along with some weather photos.

Instagram will include primarily consist of fun photos and short video clips and periodically weather safety infographics. No watch and warning information is planned to be disseminated through our Instagram profile as of now.

Trivia Questions (answers on page 7)

By BILL TAYLOR—METEOROLOGIST

1. Lightning strikes the earth how many times in a day?
A. 600,000 B. 6,000,000 C. 60,000 D. 6,000
2. True or False Mount Shasta, located in California, holds the record for the most snowfall recorded in a single storm?
3. What is the coldest kickoff temperature of a Super Bowl played outdoors?
A. 39 degrees B. 24 degrees C. 45 degrees D. 11 degrees
4. True or False Oklahoma has the highest number of tornadoes (on average) each year?

NEW EMPLOYEE SPOTLIGHT

Lisa Johnson—We welcome Lisa to the North Platte National Weather staff as our new Administrative Support Assistant (ASA). Lisa worked for TSA for 10 years at the North Platte Airport, before taking the ASA position at the National Weather Service. She has been married to her husband Luke for 25 years. They have three kids, two in college and one still in high school. Lisa and Luke love to travel and see new places, their favorite spot is the beach.

Emma Sinclair—Is our newest meteorologist, joining us this fall. She was born and raised in Milwaukee, WI and is a fan of all WI sports teams. Emma attended the University of Wisconsin-Madison where she received her degree in Atmospheric and Oceanic Sciences. She also received a degree in Environmental Studies and a minor in Mathematics. Emma is a Badgers fan with pride.

Unlike many meteorologists, Emma was interested in astronomy from a young age, not the weather. Yet, she found an interest for weather in high school when taking an Astronomy and Meteorology class. She had been known to watch the severe storms overhead while everyone rushed to the basement, so the fit was not a surprise. Emma is truly passionate about the planet we live on and hopes to continue to find more ways to live more sustainably.

In her free time, Emma likes to hike, try new foods, and watch movies. She also enjoys travelling and looks forward to future trips once it is safe again!

Before coming to NWS North Platte, Emma worked in Denver, CO for an Energy Markets Consulting firm. She previously interned for NBC26 in Green Bay, WI, did research for the Space Science and Engineering Center (SSEC) in Madison, WI, and volunteered at NWS MKX in Sullivan, WI. She is looking forward to bringing her unique background to NWS North Platte.

She is excited to bring the essence of the Great Lakes with her when she visits Lake Maloney and Lake McConaughy for the first time this summer and is excited to experience what the weather is like on this side of the Midwest.

WEATHER TRIVIA ANSWERS BY BILL TAYLOR

1. The answer is B; 6,000,000! The perfect place to see lightning strikes is Lake Maracaibo, Venezuela where there is an 80% chance you will experience a nocturnal thunderstorm. Night is the best time to watch lightning!
2. True! 189" fell February 13-19 in 1959. California may be known for it's sunny weather, but strong Pacific storms during the winter can bring incredible amounts of snow to the Sierra Nevada Mountains where Mount Shasta is located. Just this week a strong Pacific storm system is forecast to bring 5-8 feet of snow! These heavy snow events are critical to the state, as much of the state's water supply comes by way of spring snowmelt runoff from the Sierra Nevada Mountains.
3. The answer is A; 39 degrees! The temperature was 39 degrees when the Super Bowl kicked off in New Orleans, LA. January 16, 1972. This year the Super Bowl is being played in Tampa, Florida so cold weather shouldn't be an issue!
4. False! The answer is Texas! The size of Texas has a lot to do with it. Actually, Oklahoma ranks 4th behind Kansas (number 2) and Florida (number 3). Most of Florida's tornadoes are spawned by hurricanes and not classic supercell type thunderstorms like we see in the Central and Southern Plains. In case you're wondering, Nebraska ranks 5th with an average of 57 tornadoes each year!



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Comments and suggestions are
always welcome. Your feedback is very important to us!

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